

upon this will come an appalling moral degradation which will gradually permeate the masses. . . . The most honourable traditions of humanity will then reckon for nothing"? If an emotional basis of character training must inevitably lead to this, then surely it is all the more urgent that an ethical ideal of racial responsibility shall be inculcated into the rising generation, and their sentiment of duty towards their neighbour extended to include the future generation. This will furnish both a scientific and an ethical appeal, and perhaps do something to stem the downfall of western civilisation which Dr. Foerster foresees in the inevitable weakening of the religious organisations during the period of transition from an ignorant to an educated populace!

Boaz, FRANZ. *Changes in the Bodily Form of Descendants of Immigrants.* New York: Columbia University Press. London. Henry Frowde; 1912; pp. xii. + 573; price 7s. 6d. net.

THIS volume contains a complete account of the researches undertaken by Professor Boaz at the request of the United States Immigration Commission. It is reprinted from the reports of that body. The author's main conclusions were made public some time ago, but in this volume may be found, in addition, a detailed tabulation of the anthropometric data on which they are based, and also a consideration of some of the criticisms which have been directed against them. The most remarkable changes pointed out are in the dimensions and form of the head among Hebrews and Sicilians. The relation between the length and breadth of the heads is usually expressed as the "cranial index," that is to say the breadth is recorded as a percentage of the length. In persons whose heads are long and narrow the cranial index will be low, and where it is short and broad, high. Hebrews born in Europe appear to have a cranial index of about 83, whereas the heads of Sicilians in Sicily have an index of 78, about that of Oxford undergraduates. In America the Hebrew skull gets relatively longer and the Sicilian relatively shorter, the index changing in the first case to 81 and in the second to 80.

As a simple explanation of the change observed in the former case, it has been suggested that in Europe the babies are kept swaddled in manner which binds them hand and foot. Thus constrained they are placed on their backs, so that the skull, while in a plastic condition, is subjected to a more or less continuous pressure from behind, and its length decreased thereby. Consequently, the cranial index of the European-born Hebrew does not represent the true racial skull form but merely an artificial condition, due to a restrictive method of clothing babies which is abandoned in the free air of the great American Republic. The children who pass their early infancy in the United States lie as it pleases them and their heads attain a natural length, which shows itself in the decrease of the cranial index.

This explanation is carefully considered by Boaz, but he gives many reasons for not accepting it. Evidence is also brought forward to show that the apparent change is not merely due to a change in the type of Hebrew immigrant. It is also noted that the relative length of the skulls of Hebrews appears to increase with the length of time spent by their mothers in America before their birth. In estimating the reliability of these and other results obtained, it must be borne in mind that the numbers dealt with are rather small, and it has thus been often necessary to compare or class together measurements and indexes which, in their original form, could not be fairly compared and grouped together. This necessity has involved the application of rather elaborate corrections to the crude data—a process which sometimes introduces an element of doubt as to the meaning of the conclusions arrived at.

EDGAR SCHUSTER.